SPENDING FOR POLITICAL SURVIVAL:
ELECTIONS, CLIENTELISM AND GOVERNMENT EXPENSES IN MEXICO
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Scott Morgenstern

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ELECTIONS, CLIENTELISM AND GOVERNMENT EXPENSES IN MEXICO
"La injerencia del ejecutivo federal en los asuntos que corresponden al poder estatal es un hecho fehaciente"¹

(Martínez Assad and Arreola Ayala, p. 117)

Introduction

Mexico’s Budget Minister (Hacienda) recently claimed that the government does not use public funds for electoral strategies and that to think that public funds could determine elections was “utopic”². It is also well known the PRI’s gubernatorial candidate in Tabasco spent over $70 million dollars in his 1994 campaign. Where did this money come from? Many contend that such funds come from the federal treasury which implies that federal funds are spent according to the PRI’s electoral exigencies, not the “common good”³. The purpose of this article is to explore federal spending to determine the degree to which the government makes political calculation for its expenditures. In short, this paper asks where on the Machiavelli-Platonic scale the Mexican government fits.

The primary hypothesis of this paper is that the Mexican federation and most states, as they are controlled by a hegemonic power that is for the first time being electorally challenged, should spend at least part of their budgets strategically. In particular, there are three ways for a government to spend its funds. It can spend money throughout the nation based on economic necessities, or it can bring in electoral or clientelistic interests into the calculus. I test these latter two possibilities, hypothesizing that the PRI-controlled governments spend more in the run-up to both state and federal elections and to pay-off their clients. To test this hypothesis I use multivariate regressions to correlate electoral timing and results with spending on social programs (in particular Ramo 26, PRONASOL and INFONAVIT), federal public investment, debt, and federal-to-state transfer payments.

The paper is organized as follows. In the first section I justify the use of the rational actor assumption for the Mexican case. In the second section I explain the basic structure of the Mexican federal system and note, in particular, the importance

¹ The title, as well as many of the ideas for this paper, are borrowed from Ames, 1987.
² La Jornada, December 19, 1996. p. 34.
³ See, for example, Molinar and Weldon, 1994, who discuss the strategic use of Solidaridad (the anti-poverty fund); an interview with the sub-secretary of Regional Development defending the use of a health and education fund, Reforma, January 15, 1997; and the above cited article where the Budget Minister also had to answer questions about strategic versus defensible use of federal funds.
of federal funds in states’ revenues. The third section begins the data analysis, showing significant correlations of federal spending with electoral cycles and the PRI’s electoral strength. The final section then discusses the unreliability of some data and how much of federal spending is unaccounted for in the official statistics. These factors imply a need for further testing, which may soon be possible now that the PRI has lost its 70 year old monopoly control of the government. Given that I find important results even with this poor or biased data, I conclude that better data would likely confirm my results.

1. The Rationality Assumption

While in other work I generally scorn the idea of a state—or even a party—as a rational actor (Morgenstern, 1996), this paper unabashedly assumes that the Mexican federation and its component states should act rationally. The general problem with the rationality assumption for a country is that countries are made up of multiple actors who must interact and act in their own interests, not in the interests of the country as a whole. Thus legislators have their own reelection or pursuit of other careers in mind when they make decisions, presidents have different constituencies and different ideas of the common good, territories may have different needs than the federation, and the bureaucracy may be more interested in control of resources than the proper allocation of funds or implementation of programs.

The problem is even more complicated when we introduce parties to the puzzle. Parties are often taken as primary agents in political decisions, whether they be democratic transitions (González, 1993), electoral politics (Downs, 1954; 1976), coalition politics (Laver and Shepsle, 1990; Lupia and Strom, 1995) or democratic consolidation (Mainwaring and Scully, 1995; Przeworski et al., 1995). It is uncontroversible that at times parties are able to act as coherent units and play important roles. For example, the leaders of the Uruguayan parties were central to the negotiation process leading that country out of their dictatorship. In Venezuela the leaders of the AD held their supporters in check facilitating the pact that yielded a durable democracy. But there are also examples of parties failing to act rationally. The constant defections from the Brazilian and Ecuadorian parties and the low levels of discipline in Colombia are evidence enough that the parties are unable to make a collective decision. In short, parties can shape policy, but as they are composed of individual (rational) actors, we cannot assume a party will act as an individual unless the leaders have such tight control that they can dictate policies. If not, we must explain the relation among leaders and followers, as well as the decisionmaking process, in order to understand party decisions.
In sum, a state's decisions are largely a function of the relationships among multiple individual actors, some of whom are grouped into parties. Some of the parties will be organized such that they can take collective and rational decisions, while others will yield decisions that are the result of compromises that represent the best interests of the members. A final state decision will thus rest on what the parties decide, what the president desires, how the bureaucracy implements the programs, and the power balance among all of these actors.

For most countries, this confluence of actors and powers will not generally result in a rational decision for the state. Some countries, however, can, act rationally. In international relations theory the realists are often able to build convincing cases for the rationality of state actions. Grieco (1996) for example, builds a convincing case for German and Japanese actions in relation to their interest in building and supporting international organizations. Others however, question this assumption citing, for example, the differences between what a leader wants for her country in an international treaty with the ability of those leaders to win domestic approval of their plans (Putnam 1993).

The question, then, is when is an assumption of a rational state defensible? Probably no government is insulated enough from various interests that they can act without considering the probable reactions of various domestic or international actors. Even the leaders of military governments require domestic support to maintain their power and they must therefore cultivate their support with policies. It is clear, however, that the more centralized a government is (military or otherwise), the more rational its decisions.

Several factors determine the degree of a government's centralization. First, are the decisionmaking powers concentrated in the executive or diffused among various branches of government? This implies that military governments which generally rule without an opposition legislature, are at the extreme level of concentration. Parliamentary systems are more centralized than presidential systems, but a parliamentary cabinet's decision must be ratified by the parliament. All else equal, a presidential system would then be the least unified.

While military governments are probably the most centralized under most conditions, several factors can considerably contribute to the centralization of presidential systems or the decentralization of parliamentary systems. These include the executive-legislative balance of power, the party system (broadly defined), and federalism.

First, it is clear that if power is concentrated in the executive, then there will be a higher degree of centralization than where power is shared with a competing (and collective) institution. A prime example is Argentine President Menem's ability to

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4 There is some unfortunate confusion about the word state. Here I am using state here to imply the country as a whole, at other times—which should be clear from the text— it will imply a component parts of the federation.
decrease policies to which the legislature is virtually powerless to react. In most Latin American cases, however, powers are relatively balanced as legislatures must delegate the power to decree or approve decrees ex-post (Carey and Shugart forthcoming). In general, then, under most constitutions, powers are not centralized.

The next factor, the party system, is at least as important to determining the level of centralization as is the formal balance of power. By “party system” I am referring not only to the number of parties or their ideological spread, but to the degree to which the parties are disciplined and their relation to the executive leaders. While the ideological spread is unimportant to my story, the number of parties is crucial. Actually, the total number or the effective number is not telling either; the only important number is how many parties make up the ruling coalition. And this number is only important in so far as we know it is one or greater than one. If it is greater than one, we know that the government cannot be highly centralized.

Even if there is only one party in the ruling coalition we still must know whether or not the party is disciplined in order to determine whether or not the government is centralized. In addition, if the party is disciplined, we need to know whether or not they follow the president’s demands. Colombian presidents, for example, have often a majority of their co-partisans in the congress, but this has not yielded consistent support since the parties are not disciplined.

Finally, federalism can affect the level of centralization. In a confederacy the national government only makes decisions when the member territories allow it. In a unitary state the opposite is true, and in a federal system, the federation and the member territories share power in a defined way. Hence in an ideal-typical world, a unitary system is the most centralized, followed by federalist systems, and then confederations.

Outside of the ideal-typical world, federalist systems vary tremendously in the relationships between member territories and the national government. In countries such as Australia, Germany, and the United States member territories raise and control a tremendous percentage of their budgets while in others, such as France or Mexico, the federation is the dominant player. Some constitutions put strict restrictions on what the members of the federation can do, while others put more restrictions on the federation. In short, noting that a state is federal is insufficient to determine the degree of centralization.

In sum, the degree of a state’s centralization (military or otherwise) is directly and positively related to the reasonableness of the rationality assumption. Centralization is a function of the party system, division of powers, and federalism. In Mexico, two of these three factors—presidentialism and federalism—point to (at most) a moderately centralized state. But, their dominant and cohesive party, the PRI, combined with a weak form of federalism, yields an unambiguous classification as a centralized state.

Consider first Mexico’s brand of federalism. As shown in table 1, the federal government is responsible for over 80 percent of total government expenses. More
telling is that the greatest source of state revenues are federal transfers, or participaciones. These transfers are related to the taxes that the states collect, but it is the federal government that determines the tax rates and controls the funds.

Maybe even more telling about the states' limited autonomy is the clause in the constitution that allows the federation to declare a state government null and void. This clause has not been enacted recently, but all presidents have used this or less formal powers to remove governors from their posts. Though some left for other political posts, in only 15 of the 31 states did elected governors finish their terms while Salinas was president (1988-1994).

Table 1:

<table>
<thead>
<tr>
<th>% of Spending by Levels of Government</th>
<th>1982</th>
<th>1986</th>
<th>1991</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>91</td>
<td>78</td>
<td>81</td>
</tr>
<tr>
<td>State</td>
<td>8</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Local</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: Cabrero, 1996.

This is not to suggest that the Mexican states lack some autonomy. Indeed Martinez (forthcoming) shows that the states have tremendous discretion in their allocation of funds to their component parts, the municipal governments. The implication, instead, is that the states have little power to influence federal spending patterns.

While weak federalism is an indicator of a centralized government, the root of the highly centralized Mexican government (and maybe of the weak federalism as well) is the party system and the president's relation to it. As is well known, Mexico has been ruled by a dominant party since 1929 which almost never fails to follow the president's orders. There have been party splits leading to dissident candidacies (1946, 1952, 1988), but the PRI has never lost a presidential election and, until this year, has maintained large majorities in the heretofore quiescent Congress.

This concentration of powers has been the source of numerous studies (Carpizo, 1983; Garrido, 1990; Weldon, 1997; Casar, 1997) which point to the ex-

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5 Population and economic development are also factors in the formula for redistributing the funds. The system is explained in more detail below.

6 Article 76 of the constitution gives the senate, with recommendations of the president, the power to name a new governor after the powers of the state have been dissolved. The constitution, however, is unclear about how such powers are dissolved.

7 The PRI's majority fell below the required 2/3 for constitutional reforms in 1988 and under President Zedillo the Congress began to show some signs of life. It opposed the president on social security reforms and changed some important measures in the 1996 electoral reform package.
ceptional powers of the president. Carpizo and Garrido, for example, find the powers so broad that they divide them into constitutional, metaconstitutional, and extraconstitutional. The basic conclusion is that without important institutional checks, the president has had very wide latitude in policy decisions, freedom in nominations of candidates, and virtually free control of public funds.

The source of the Mexican president’s powers is generally traced to his control of electoral and bureaucratic posts combined with the constitutional clause that prevents immediate reelection of members of congress, governors, and the president. Since politicians cannot build a career in their current electoral posts, the president’s power of appointment affords him great leverage over the elected officials. Moreover, since he controls nominations (including the nomination of his own replacement), he is able to reward followers and punish dissidents.

In sum, while a combination of federalism and presidentialism do not necessarily generate a centralized state, Mexico’s brand of these characteristics yields a state with powers so concentrated that assuming the ability of the state to act rationally is justifiable. Power is officially divided among a president and an independently elected legislature and is supposed to be shared with the federal territories. But, because the president has, until this year, controlled the dominant party, the division and sharing of powers does not significantly dilute the centralization of Mexico’s power center.

I. Mexican Federalism

In spite of a weak form of federalism that contributes to centralism, state and local governments are crucial to the PRI and the subject has received significant recent attention (Lujambio, 1995; Martínez Assad, 1990; Voz y Voto, Mayo 1996; Díaz Caye- ros, 1995, 1996; Cabrero, 1996). Some of the attention is attributable to economic or public administration interests but the political effects —namely centralization and democratization— have also received attention. Because state and local governments are a critical link between the federal government and diverse regional, economic, and societal interests, state governors gain valuable experience that they often carry to federal positions. Their reactions are also important tests for federal leaders looking for new national leaders. In addition, states and localities are important to the federal leaders as elections serve as indicators for the strength of the national party. Finally, the elections provide another important tests for ambitious state and local leaders, especially since the late 1980s when the these races became true contests. For these reasons, even though the federal government dominates the other levels of government, allocation of federal money among the states, and state money among the municipalities, is crucial.

In order to discuss federal and state allocations, however, a bit more background on fiscal federalism is necessary. In this section, therefore, I will describe the
principal sources of state and local budgets, highlighting how much each depends on the higher level of government for their finances.

State Budgets and the National System of Fiscal Coordination

Income for the Mexican states is reported under eight categories: taxes, participaciones or federal transfers, debt, products, derechos, advantages (aprovechamientos), third-party accounts, and carry-over funds (disponabilidades). Predominant among these categories, as shown in the following table, are participaciones. While their importance has fallen in recent years, they have accounted for between 38 and 60 percent of the sum of state budgets in the 1990s.

| Table 2 |
| Breakdown of Income Categories in Mexican States | 1982-1994 |
| (Percent of Total) |
| Taxes | 5.6 | 1.9 | 2.8 | 3.3 | 3.1 | 2.7 | 2.2 |
| Participaciones | 46.8 | 61.0 | 59.9 | 59.1 | 48.7 | 43.8 | 38.2 |
| Derechos | 2.5 | 1.6 | 2.4 | 3.0 | 3.3 | 2.8 | 2.5 |
| Products | 2.1 | 5.2 | 3.5 | 2.3 | 3.7 | 1.7 | 1.1 |
| Aprovechamientos | 11.0 | 2.0 | 3.6 | 4.6 | 7.3 | 15.6 | 23.9 |
| Public Debt | 8.3 | 6.0 | 7.2 | 12.6 | 11.2 | 10.6 | 10.1 |
| Other | 23.7 | 22.4 | 20.6 | 21.5 | 22.9 | 22.7 | 21.9 |

Source: Elaborated from Inegi, Finanzas Públicas Estatales y Municipales de México, various years.

While the above table shows the dominance of the federal government funds (in the name of participaciones) in state budgets, it should be recognized that states are quite heterogeneous and some therefore are much more successful in raising their own funds than others; participaciones account for as little as 18 percent of the Nuevo Leon's 1994 budget but over 90 percent of the budget in Hidalgo (see Appendix I) The charts in Appendix II then detail the relations between wealth and participaciones. In particular they show that while the more wealthy states (as measured by 1988 GNP), do receive more participaciones than poorer ones, the correlation is far from perfect. In fact, the second chart, detailing 1994 participaciones, shows almost no relation between participaciones and state GNP, except for the most wealthy states.

In part, the weight of the participaciones (as well as the other categories) should be magnified even more because the residual category, at least for the years
Síorgenstem's Spending for Political Survival: 1990-1994, is largely comprised of money that is collected for third parties such as other level of government or possibly a private company (as in the case of a highway construction company). As such, the money is really a debt, not an income that the state can use at its discretion.

As the dominant source of most states' income, participaciones are the backbone of Mexico's federalist system. Mexican fiscal federalism is embodied in the National System of Fiscal Coordination (NSFC; Sistema Nacional de Coordinación Fiscal) (Arellano, 1994; Díaz Cayeros, 1996) which has as its ostensible goal to increase tax revenues by coordinating tax systems and accountability. To achieve this goal the formula by which the states receive participaciones has been constantly revised (there have been reforms in every year in the 1990s). The basic scheme, however, continues to base transfers on the level of state tax collections. By returning a sufficient part of these collections, the federal government has induced all states to participate in the program (which they did not do until 1973) and has created incentives for improved collections (Díaz Cayeros, 1995). It is important to note, however, that participaciones do not only reflect state tax collections. In addition to the 45.17 percent currently allocated according to tax collections, another 45.17 percent is distributed according to population and the remaining 9.66 percent is ear-marked to help the poorer states (Ortiz Ruiz, 1996).

One might note that the NSFC demonstrates an interdependent relation between the states and the federal government. The federal government relies on the states for tax collection and in return the states receive participaciones and other federal money. It is the federal government, however, which has the power to revise the programs.

Maybe even more important than the federation's ability to revise the system is the federation's continued resistance to auditing controls. In addition, the federal government, not the states, collects the taxes (most importantly the value added tax, IVA) that are used to calculate the states' participaciones. Several states have complained that their collections should have entitled them to more participaciones than the federal government determined. The most celebrated case occurred in Baja California under the PANista government of Ernesto Ruffo. In 1992 Ruffo filed a federal suit claiming his state had been underpaid. He claimed that he had calculated his states' tax collections and that his state received less than half the taxes it had collected (Cortés, 5/8/92). In an interview he claimed that the evidence he presented for the trial was subsequently "lost" by the officials, though it must be noted that an independent academic arbitrated and found Ruffo's case lacking.

Just like the probable manipulation of tax figures, the federal government reputedly manipulates the other key number that goes into the participaciones formula:

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8 In 1990 the reporting of the income changed. Prior to 1990 the residual category was comprised of "operations" and "accounts of order".

9 Luis Aguilar, who later became undersecretary of government for Zedillo.
population. The problem with the population figures has often created fights which, in 1980 led the government to withhold the census from publication.

Other Budget Items

In addition to third-party transfers, the other cause of the fall of importance of participaciones in state budgets has been the tremendous increase in aprovechamientos. These funds are basically a residual category, defined as "funds that the government receives due to public laws, not classified as taxes, participaciones, derechos or products, but that are derived from normal sources or ordinary income" (INEGI, Finanzas Públicas, Estatales y Municipales de México, 1990-1994).

The next largest category, accounting for about 10 percent of state income, is debt. In this category all that is reported is direct debt contracted with either private or public institutions. In the discussion section I will discuss indirect debt, an important category that is left out of these official statistics.

Finally, taxes, products, derechos, and disponibilidades make up the remaining seven to eleven percent of the published budgets. The primary state tax is a payroll tax (impuesto sobre la nominá), though some states also collect various taxes on cars, alcohol, and cigarettes. Derechos are funds that states collect for various public services, productos are revenues paid to the state for exploitation or sale of state resources, and disponibilidades are funds carried over from previous years.

In addition to the funds that go to state budgets, the federal government allocates funds for municipal governments. Municipal governments receive, as a whole, about 20 percent of the what the states receive (18 million pesos in 1994).

Municipal Finances

Municipalities have three sources of funds: the federal government, the states, and municipal taxes. This affords them one advantage and one disadvantage as compared with the states. Their advantage is that they have more revenue-raising powers. Unlike the states which have limited ways to raise their own money, the municipalities can generate income through selling water rights and various types of permits, and most importantly, they can also tax property. These taxes can amount to 40 percent of a municipality's income-quite a contrast to the states whose taxes yield only a few centavos for every peso of their total income.

The disadvantage facing the municipalities is their relation with the states. Unlike the states which receive payment from the federation according to a defined formula, only about one-half of the states have a law defining how state resources are to be distributed among the municipalities. The federal law calls for 20 percent of a

10 These are defined below.
state's allocation of *participaciones* to go to the municipalities, but a simple regression show *no relation* between what a state receives and what it allocates.\(^{11}\) In 1994, the states allocated to the municipalities just under 25 percent of the 34 billion pesos they received as *participaciones*. The range, however, was dramatic; two states (Hidalgo and Oaxaca) allocated only ten percent of their funds while four states (Nayarit, Nuevo León, Tamaulipas, and Tlaxcala) allocated around 40 percent (Table 3). Moreover, Martínez (unpublished) shows that among the municipalities, there is also tremendous variation, completely unrelated to the municipalities tax collections (on which state level *participaciones* are based). The states, in short, apparently have even more discretion in allocating funds to the municipalities than the federal government does in relation to the states.

### Table 3

<table>
<thead>
<tr>
<th>Municipal Participaciones as a Percent of State Participaciones, 1994</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;15%</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>Hidalgo</td>
</tr>
<tr>
<td>Oaxaca</td>
</tr>
<tr>
<td>Tabasco</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

*Source: Elaborated from INEGI, Finanzas Públicas Estatales y Municipales de México and INEGI’s internet database, SIMBAD (Sistema Municipal de Base de Datos)*

Other Federal Support

State and municipal reliance on federal funds does not end with these state-level budget categories. In particular, the states receive significant funds from direct federal investments. These investments are primarily of three types: anti-poverty programs, direct public investment, and investment by state corporations.

This last category is crucial to some states, such as the oil-rich states where the state oil company, Pemex invests heavily in machinery, infrastructure, and even housing. Other state agencies, such as the recently disbanded telephone company (Telmex), also account for significant investments, none of which is included as federal public investment, and thus data are difficult to attain.

\(^{11}\) In the regression I ran the state’s total allocations of *participaciones* to the municipalities as a function of a state’s *participaciones* and some control variables for each state pooled over the years 1989-1994. The t score was approximately -0.25.
We do have data on federal public investment, as well as for spending on public housing programs and and poverty alleviation. Mexico’s banner poverty program, PRONASOL (Programa Nacional de Solidaridad), was set up by Salinas shortly after taking office in 1988. While it has been lauded for some successes, it has also been criticized for its political applications (i.e. Molinar and Weldon, 1994). Most of these studies only look at one year of data, but their compelling results make PRONASOL spending a likely place to find strategic use of public funds.

Housing expenditures have not been extensively studied. These expenses are divided into various programs, which have varied in their budgetary importance. For this project I have focused on INFONAVIT, the National Institute for the Funding of Workers' Housing (Instituto de Fondo Nacional de la Vivienda para los Trabajadores) due to its rumored political biases.

Finally, federal public investment is a tremendous input into most state economies. On average from 1982 to 1988 public investments in a given state were worth more than twice that state’s participaciones or about one and one-quarter times a state’s total state income. The range, however, was quite large as investments were worth only about ten percent of income in several cases to almost ten times Campeche’s state budget in 1986 and 1987. It is also interesting to compare these figures against participaciones since participaciones are a rough indicator of a state’s economic capacity. As the table shows, public investments outweighed participaciones by 18 times in one state (Campeche, 1987) while in other states it equalled only do two-fifths of participaciones (see Table 4).

II. Evidence for Clientelistic and Electorally Motivated Spending

The PRI’s hierarchical organization and monopoly of power that gives it the potential to act strategically, the tremendous reliance of the states on federal funds, and the PRI’s history of electoral fraud, lead to my hypothesis about clientelistic and electorally strategic relations of the use of federal funds in the states. In this section, I use regression analysis of panel data on a wide range of inflation-adjusted spending categories for the 31 Mexican states (excluding the Federal District) and 13 years (1982-1994) that strongly suggest that the federal government does weigh electoral exigencies and/or the PRI’s support level in allocating its scarce resources to the states.

Data and Methods

To test my hypothesis, I consider several (per capita, inflation adjusted) spending categories as dependent variables: federal transfers, public investment, state debt, INFONAVIT, and PRONASOL spending. As noted, I use OLS regressions on data for the 31 states (excluding the Federal District for which many data are unavailable and because governors there were appointed, not elected, until 1997) from 1982-1994,
for a total of 403 data points. These dates are significant since they are the end points for presidential elections, held every six years. As a result, they allow tests for the hypotheses throughout two complete presidential terms.

Table 4

Federal Public Investment

<table>
<thead>
<tr>
<th></th>
<th>Public Investments as % of Total Income</th>
<th>Public Investments as % of Participaciones</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGUASCALIENTES</td>
<td>108.2</td>
<td>120.1</td>
</tr>
<tr>
<td>BAJA CALIFORNIA</td>
<td>77.8</td>
<td>39.3</td>
</tr>
<tr>
<td>BAJA CAL. SUR</td>
<td>390.7</td>
<td>123.0</td>
</tr>
<tr>
<td>CAMPECHE</td>
<td>556.3</td>
<td>742.3</td>
</tr>
<tr>
<td>COAHUILA</td>
<td>374.2</td>
<td>121.0</td>
</tr>
<tr>
<td>COLIMA</td>
<td>348.9</td>
<td>105.2</td>
</tr>
<tr>
<td>CHIAPAS</td>
<td>150.4</td>
<td>38.2</td>
</tr>
<tr>
<td>CHIHUAHUA</td>
<td>233.0</td>
<td>96.6</td>
</tr>
<tr>
<td>DURANGO</td>
<td>180.6</td>
<td>84.3</td>
</tr>
<tr>
<td>GUANAJUATO</td>
<td>158.8</td>
<td>71.4</td>
</tr>
<tr>
<td>GUERRERO</td>
<td>370.9</td>
<td>94.7</td>
</tr>
<tr>
<td>HIDALGO</td>
<td>837.5</td>
<td>178.6</td>
</tr>
<tr>
<td>JALISCO</td>
<td>46.1</td>
<td>31.3</td>
</tr>
<tr>
<td>MEXICO</td>
<td>55.2</td>
<td>46.4</td>
</tr>
<tr>
<td>MICHOACAN</td>
<td>608.3</td>
<td>448.5</td>
</tr>
<tr>
<td>MORELOS</td>
<td>108.6</td>
<td>100.2</td>
</tr>
<tr>
<td>NAYARIT</td>
<td>434.3</td>
<td>84.3</td>
</tr>
<tr>
<td>NUEVO LEON</td>
<td>55.5</td>
<td>17.2</td>
</tr>
<tr>
<td>OAXACA</td>
<td>245.9</td>
<td>86.2</td>
</tr>
<tr>
<td>PUEBLA</td>
<td>192.5</td>
<td>68.2</td>
</tr>
<tr>
<td>QUERETARO</td>
<td>259.4</td>
<td>88.3</td>
</tr>
<tr>
<td>QUINTANA ROO</td>
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<tr>
<td>Maximum</td>
<td>837.5</td>
<td>742.3</td>
</tr>
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Since I use per capita data I am not particularly concerned about heteroscedasticity, though I do test for and correct for serial correlation. The bigger problem is that my use of cross-temporal and cross-geographic (often called panel or pooled-time series) data implies a probably unrealistic assumption that effects are constant for all states and years. As a result I followed Pindyck and Rubinfeld (1981) and Hsiao (1986) by employing dummy variables for each state and year to account for variance in the intercept terms. After running the equation with and without the dummy variables, we can compare the residual sum of squares equations for the two equations in an F-test. If there is not a significant difference, then we can assume that the pooling method (i.e. without the dummy variables) is appropriate. Most of these F-tests proved positive and changed my coefficients significantly and all of the models I report thus include the dummy variables.

Models and Results

To model clientelism, the goal is to correlate the PRI's support in a state with federal expenses, hypothesizing that federal funds will increase to serve their strongest clients. Similarly, I hypothesize that federal funds will increase to meet electoral needs. Both of these straight-forward ideas have some important modeling problems, however. Regarding the clientelist hypothesis, we could measure the PRI's support based on governor, presidential, local, or congressional elections, all of which are at different times. Moreover, when would a strategic party take into account a changed level of support? My solution to the problem was to consider two variables, the PRI's percent of the vote in the current year or most recent governor's election (PRIGOV) and the their vote percentage in the current year or most recent presidential election (PRIPREZ).

The basic electoral calculations hypothesis is that the PRI will increase outlays to support presidential and gubernatorial elections. There are two primary concerns, however. First, will the PRI support all elections or only those where it is competitive?

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12 Here I test state-level spending. It would also be theoretically interesting — though practically very difficult — to test a different type of clientelism. Instead of giving money to the states, the strategic planners could give money to important political actors. While I have not verified the figures, a politically motivated study by an opposition legislator, Pablo Gómez (1996) sustains this hypothesis. He claims that not only does the Mexican Workers' Federation (CTM), a formal wing of the PRI and crucial electoral player receive discretionary funds from the president, but in the 1994 election year, although the CTM was authorized a subsidy of 2.3 billion pesos, they received 15.3 billion.

13 Using, for example, the 1988 electoral results to measure outlays for 1988 is theoretically a bit problematic since I expect outlays to affect the result. But, using 1982 results (or even 1985 congressional results) would neglect important changes in the electorate. My hypothesis here is that the PRI had good information about their support prior to the elections and acted accordingly. For the electoral exigency hypothesis I treat the timing more carefully.
If competition is a factor, how should it be defined? Is an election competitive if the PRI receives just 60 percent or is 70 percent also competitive? Would the planners judge competition based on new polls or previous electoral results? Second, when should a strategic party increase spending for an upcoming election? If the election is in November (as the presidential elections) the election year itself is a likely candidate. But if the election is in March, would a Machiavellian planner increase the budget in the current or previous year?

Since I am interested in support of presidential and gubernatorial elections, I included two dummies in my models. The presidential election dummy (PREZELC) presented no problems, it simply represents presidential election years. The competitive variable, as explained, caused more problems and thus I tested various specifications. I chose an indicator (COMPREZ) defined as 1 if in the previous election the PRI won less than two-thirds of the vote in the previous presidential election. I wanted to use an indicator based on previous or future elections, but there are few states in which the PRI won more than two-thirds in 1988 or 1994.

For the governors' elections, I also tried different definitions of the dummy variable, finally settling on GOVELEc, defined as 1 if a state holds elections after April 1 in the present year. If elections are held in the first three months, I hypothesize that the budgetary increases will come in the previous year. The competition variable (COMPGOV) is equal to one if the PRI won less than two-thirds of the vote in either the previous or the current gubernatorial election. While I was forced to use just previous electoral results for the presidential competition variable, here I was able to consider both upcoming and future elections due to the different electoral timing and the multitude of states with non-competitive governors' elections.

In addition to these primary variables, I also tested whether PAN governors were treated differently from PRIista governors with another dummy (PAN) and the models include controls for real federal GNP per capita (GNPPC) and the state's GNP. Finally, as noted above, I included dummies to account for the different impacts across states and time. Since the time dummies often created serious multicollinearity problems, I sometimes substituted them for a singular variable, YEAR.

Participaciones

In the first regressions I tested for the impact of clientelism and elections on real per capita federal transfers to the states (participaciones) and state debt. Unlike the other spending categories that I evaluate, as noted above, in large part, participaciones are not discretionary. Moreover, the discretionary part of participaciones has become smaller over time. I still test this variable for politically derived spending for four reasons. First, the formula for participaciones has changed frequently and there is a part

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14 State GNP is reported only every five years, or so (1980, 1985, 1988, 1993). I thus interpolated for the years for which there are no data.
of the funds that are determined on a discretionary basis, supposedly for a progressive redistribution of wealth (9.66 percent since 1994). Second, just given their sheer importance within state budgets, it seems reasonable to expect a relation between participaciones and political motivations. Third, and most important, as discussed above, there are accusations that the formula inputs are false. Finally, one study does find a positive link between participaciones and political variables (Kraemer, 1997).

To test this hypothesis I ran regressions testing for the impact of the PRI’s electoral support, changing competitive status, and upcoming elections on per capita participaciones. Though I tested several specifications, I found no evidence for politically based spending. The only significant t-score in the regressions was that measuring the PRI’s state support (as measured by electoral returns in the previous federal election), but anomalies in one state, Tabasco, drove this result.¹⁵

Given that participaciones are determined by a formula, this is not a particularly surprising result, though the formula’s discretion and Kraemer’s findings leave some room for doubt. It should be noted, however, that Kraemer’s results are not particularly strong since his variable testing for upcoming state elections was negative and he tests only two years of data one at a time, leaving a sample of only 31 observations. Moreover, when I tried to use his definition for the dependent variable (standardized per capita participaciones) but my independent variables, I still found no significant relations. This suggests his results are not robust.

Debt

While participaciones do not appear to be allocated for political purposes, there is evidence that debt is contracted for electoral ends. As noted, there is only data for one type—and possibly the least significant type—of state debt. Debt seems a likely source for extra funds for both the state and federal elections, but there is no clear reason why debt should be a clientelistic resource. I therefore tested the relation of the electoral variables with per capita debt and excluded the PRI’s support level from the regressions. The data suggest an important correlation between a state’s debt the timing of competitive presidential and gubernatorial elections. Though this is not shown in the table, competition is the key to this correlation; the results are very weak if we test this model using elections without regards to competitiveness.

¹⁵ Tabasco received many more times the per capita level of participaciones than any other state and as the presidential vote fell, so did their participaciones. While this may be an interesting finding, it certainly is not proof that the relation is not spurious. It should probably be noted when a dummy variable is included for Tabasco, not only is the dummy exorbitantly significant (t=140), the political variables turn negative and significant.
Table 5
Real State Debt Per Capita

<table>
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<th>Pooled Data w/ dummies for states and years</th>
<th>Pooled Data w/out dummies</th>
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<td>COMPGOV</td>
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<tr>
<td>Adjusted R squared</td>
<td>.55</td>
<td>.34</td>
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</table>

*corrected for autocorrelation
n=217, 31 states from 1988-1994

Federal Public Investment

In a study of state and local finances Soares (1994) reports that federal public investment “does not appear to be related to any obvious indicators such as the marginación index, per capita GDP, or geographical location (North, Center or South).” Soares, however, failed to consider political variables—and here I find strong correlations. These funds seem to be spent to support at least all presidential (the evidence is weaker for gubernatorial elections) while competition, if anything, reduces these outlays (Table 6). This result is robust to various specifications of the model and one specification (where the year and competitive election variables are excluded) also give credence to an increased use of these funds in strong PRI states (column 3).

It should be noted that I also tested to see if the states where the PAN held the governorship were discriminated against by reducing funds for federal public investment and found no evidence for this hypothesis. PANista ex-governor Ruffo explained that the federal government hit him in different ways, however. His most interesting example concerned requirements for matching funds. While he called his first two years in office a “honeymoon”, in his last four years (after he had manifested his ability to create political problems for the federal government) his state was forced to contribute a much greater portion of project costs to receive federal investment funds.

Pronasol

Social spending by way of PRONASOL has received significant attention by academics, journalists, and politicians. While the program has been touted by its followers as an important anti-poverty and democratic tool, many have criticized the program for having strong political undertones. Molinar and Weldon (1994), for example, tested this hypothesis for the 1990 data and found that PRI electoral fates were indeed tied
to PRONASOL spending.\textsuperscript{16} Bruhn however, finds no significant relationship between PRONASOL spending and the PRI’s future electoral fates for federal elections, though she does note a well known case in which the PRI reversed its loss in one district by pouring money into public works projects.

My tests provide some evidence to support Molinar and Weldon’s findings, as I found a significant positive relation between PRONASOL spending and states where presidential elections were competitive (Table 7). I found no relation between PRONASOL spending and the actual level of the PRI’s vote or the timing of gubernatorial elections, but these variables are of secondary interest. Moreover, it is not too surprising that gubernatorial elections were not related to PRONASOL spending since Salinas was largely trying to recoup the PRI’s standing in federal elections.

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|}
\hline
\textbf{Variable} & \textbf{t-scores} & \\
\hline
PREZELEC & 4.61 & 6.09 & 4.87 \\
GOVELEC & 1.56 & 2.22 & 1.58 \\
COMPPREZ & -3.89 & & \\
COMPGOV & -1.95 & & \\
PRIPRZ & 1.21 & 0.94 & 3.71 \\
PRIGOV & 2.07 & 1.86 & 2.58 \\
STATE GNP PC & 6.56 & 5.95 & 7.58 \\
YEAR & -1.47 & -0.83 & \\
R2 & .66 & .68 & .70 \\
\hline
\end{tabular}
\caption{Real Public Investment, per capita*}
\label{tab:6}
\end{table}

*Column 3 is corrected for autocorrelation
**Not shown are the dummy variables for each state (less one)

\textbf{Infonavit}

As a final test of federal spending I considered The National Workers’ Public Housing Institute, INFONAVIT, which directs large sums of money and is notorious for its political biases. Mexico’s public housing project is quite extensive, excluding the

\textsuperscript{16} Their tests differ from mine for two primary reasons. First, their data was more limited than mine; while they look at only one year of data, I have data for six years and thus my results should be more statistically reliable. Second, they use a different poverty indicator than I employ. Since this is not my principal variable of interest, I am unconcerned about employing per capita GNP instead of literacy rates.
money given by PEMEX and other state corporations, federal programs granted 37.6 billion nuevos pesos for housing —almost 25 percent more than state participaciones— in 1994. This money is given out through several programs, the second largest of which (accounting for around one-quarter of the expenses) is INFONAVIT. The results of my initial tests showed increased expenses when competitive elections are approaching, but due to flaws in the data which I discuss below, I am skeptical of the results.

State Expenses

A final hypothesis I tested was whether the states were shifting their expenses to improve their electoral prospects. In particular, I thought that states might hire new workers or increase expenses on public works projects. Tests on these spending categories, however, refuted my hypotheses.

### Table 7

<table>
<thead>
<tr>
<th>Variables**</th>
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<td>PRIPRZ</td>
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<tr>
<td>PRIGOV</td>
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<td>Adjusted R squared</td>
<td>.88</td>
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n=403, 31 states from 1982-1994
*corrected for autocorrelation
**state dummies not shown

III. Discussion

The econometrics of the previous section provides some important evidence pointing towards political criteria in the allocation of some parts of federal government spending. In particular, there is evidence that in the run-up to competitive elections, the federal government provides extra funds for PRONASOL and possibly INFONAVIT and the states contract extra debt. Additionally, public investment increases during election years and is higher in states where the PRI is electorally stronger. Other state
and federal spending, including *participaciones*, state administrative costs, and state outlays for public works are (statistically) unrelated to these political variables.

This mixed record seems to be consistent with my interview data and review of other studies. For example, an ex-sub-secretary of education acknowledged that spending was reallocated to aid "political problems", but strongly denied a consideration of electoral considerations. Studies of PRONASOL (Molinar and Weldon, 1994; Dresser, 1994), however, suggest strong political motivations and it is well known that the many important political decisions about PRI strategies are made behind the closed doors of INFONAVIT's offices.

Two further points merit attention. First, as Skidmore and Smith (1970) warned almost three decades ago, we must be very careful about interpreting quantitative data, especially in Mexico, because such data "varies greatly according to their reliability, their relevance to the issues at hand, and —above all— the way they are employed". The unreliability is made possible by the lax accounting standards and oversight in Mexico. Until 1995 the states were not required to publish financial records, and state level GNP figures are still only available every five years. The only source state and federal financial statistics is a semi-autonomous state agency, the National Institute of Statistics, Geography and Information (INEGI). While their data is useful, there is room to doubt some of their figures as INEGI publishes figures that the states themselves do not verify the accuracy. The states themselves do not have a way to verify the quantity of taxes collected in their own territories, figures that are very important to them since they are the basis of federal transfers. The data on INFONAVIT comes directly from the Secretary of Social Development, but one year, 1992, they report much work completed and zero spending. Additionally, ministers can move funds around without serious restrictions or accountability and thus there is some reason to question the reported figures. And finally, as noted, the 1980 census was not published due to data problems.

In addition to the problems with the observed data, there are probably more serious problems with the unobserved data. In addition to the spending categories I have examined, there are multiple sources of state government finance that are not included in any published records. In particular, states receive a large percentage of their financing from indirect loans, parastatal investments, and fungible parts of the federal budget.

First, states receive significant resources from investment of public enterprises. When PEMEX, for example, invests in a new refinery or oil well, this is a significant investment for a state which is not accounted for in the official statistics. In some cases the parastatal corporations (in particular PEMEX and TELMEX), spend

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17 Interview with Luis Medina, May 1997. It should be noted that Medina was in the department of education before the era of important electoral competition.
more than the state government. These data are unavailable, however, at the state level.

Second, for some states, unreported loans are crucial to their financing. State government loans come to the states in three types. First, there are the direct loans that are reported in the official statistics. Then there are two types of indirect loans which, although they can account for significant parts of state government finance, are not reported in the state's balance sheets. The first of these are loans taken by parastatal companies with state government guarantees. For example, when a state highway commission takes out a loan, the state government is the guarantor; if the commission defaults, the banks can ask the federal government to deduct the debt from a state's participaciones. Second, it is common in Mexico for a state to get a type of credit from construction companies. Suppose that the state government contracts with a company to build a highway. If the company builds the highway with the expectation of payment over time, this is an important source of credit.

Finally, the Mexican president, his ministers, and state governors have at their disposal an important degree of discretion in allocating their funds. The most well known source of these funds is the president’s “secret” fund, known for its budgetary section number: Ramo 23. While this fund certainly allows the president important latitude, most of the fund generally goes to salary increases or to pay interest on the debt. In addition to the president’s discretionary funds, ministers have great latitude in doling out their budgets. Knowing this, governors frequently knock on ministers’ doors and if they are either persuasive or friendly, they often walk away with a check to help build a new school, hospital, or highway.

This discussion is meant to imply that better data sources would likely strengthen my already significant results. Though everyone knows that they have been fraudulent, the PRI has held elections for almost 70 years to give the appearance of liberal democracy. Given this pseudo-democracy run by a cohesive single party, this paper has hypothesized that the PRI has had the motivation for strategic spending, the means to accomplish it, and, if necessary, the means to conceal their acts. Even when there was no strong electoral competition, the PRI engaged in wide-scale fraud to

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18 My information about Ramo 23 comes from a politically motivated study by an opposition legislator who resided on the budget committee (Pablo Gómez, 1996) and an interview with an ex-official from the budget ministry who prefers to remain anonymous. For 1997 Ramo 23 contains about 38 billion pesos, around $4.5 billion dollars at the January, 1997 exchange rate. This is almost three times the value of social programs or one-half of all participaciones (87 billion). These discretionary funds have been the subject of a recent book by an opposition congressman, Pablo Gómez (1996), and numerous newspaper articles and commentaries. Though there is reason to be skeptical of Gómez’s figures, if they are close to the truth, then the president had at his disposal about 10 percent of the total of the entire budget for participaciones, the principal federal grant to states. Recently there has been more careful accounting of these funds and a very large part of them have been earmarked for special programs, namely salary adjustments, debt relief, and various emergencies. The figures, however, continue to be very large and therefore the president still has important room with which to maneuver.
serve their electoral ends. This implies that in the 1980’s and 1990s, when electoral competition started to grow, that the PRI had a strong motivation to use whatever means available to fight the competition. The PRI has also had the means to manipulate spending as Molinar and Weldon (1994) show for one year of PRONOSOL spending. This strategic spending is made possible by the tightly controlled party and bureaucratic apparatus, which allows the government to act as a unitary or rational actor. The tight control justifies assumptions about strategic actions which would include both strategic spending and a cover-up. Similar to its use of fraudulent elections, the government (and/or the president) is interested in winning elections and appearing to win them fairly and by as large a margin as possible.

Even though the government’s monopolistic control of data sources makes it difficult to substantiate these claims, my regression analysis does suggest that the PRI’s level of support and/or electoral exigencies are factors in determining the distribution of some public funds. Just this month the opposition for the first time took control of Congress away from the PRI and in the year 2000 they could even win the presidency. Now that the opposition has wrested the control of one branch of government, we may soon have a much better database from which to test these hypotheses. Not only should divided government improve oversight and thus the accuracy of data sources, if political motivations enter into decisions on how to allocate public resources, divided control of these resources should drastically alter their allocation.
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Appendix Table 1
Participaciones and State Income

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Appendix 2

![Graph showing State GNP and Participaciones, 1988](image1)

![Graph showing State GNP and Participaciones, 1994](image2)
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